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# Efficacy of Coping Skills and Self-Care Behaviors of Graduate Psychology Students in Their First Semester

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# Efficacy of Coping Skills and Self-Care Behaviors of Graduate Psychology Students in Their First Semester

## Abstract

The purpose of this study is to determine the relationship between coping styles, self-care strategies and perceived stress level during the first semester of enrollment in a graduate program in psychology. Participants were 67 graduate students enrolled either in a Counseling Psychology master's program or a Clinical Psychology doctoral program at a Pacific Northwest university. Self report questionnaires were used to assess levels of perceived stress, coping styles, self-care practices, and demographics. Although there were no overall significant differences related to perceived stress, there were significant correlations within demographic sub-groups related to coping styles and self-care practices. Future research is necessary to determine if these self-care patterns might vary for practitioner focused versus research focused programs and to determine the stability of the self-care patterns throughout graduate training and career establishment.

## Degree Type

Thesis

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EFFICACY OF COPING SKILLS AND SELF-CARE BEHAVIORS OF GRADUATE  
PSYCHOLOGY STUDENTS IN THEIR FIRST SEMESTER

A THESIS

SUBMITTED TO THE FACULTY

OF

SCHOOL OF PROFESSIONAL PSYCHOLOGY

PACIFIC UNIVERSITY

HILLSBORO, OREGON

BY

MORGAN GREEN

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

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JULY 23, 2010

APPROVED:

| Lisa R. Christiansen, Psy.D.

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### **Abstract**

The purpose of this study is to determine the relationship between coping styles, self-care strategies and perceived stress level during the first semester of enrollment in a graduate program in psychology. Participants were 67 graduate students enrolled either in a Counseling Psychology master's program or a Clinical Psychology doctoral program at a Pacific Northwest university. Self report questionnaires were used to assess levels of perceived stress, coping styles, self-care practices, and demographics. Although there were no overall significant differences related to perceived stress, there were significant correlations within demographic sub-groups related to coping styles and self-care practices. Future research is necessary to determine if these self-care patterns might vary for practitioner focused versus research focused programs and to determine the stability of the self-care patterns throughout graduate training and career establishment.

**Keywords/subject:** Self-care, coping styles, perceived stress, graduate student, psychology student

# Efficacy of Coping Skills and Self-Care Behaviors of Graduate Psychology Students in their First Semester

## **Introduction**

Multiple studies have addressed the fact that professionals and students in mental health professions have high interpersonal demands along with a high level of stress (O'Halloran & Linton, 2000; Skovholt, Grier, & Henson, 2001; Gilroy, Carroll, & Murra., 2002). Self-care and specific coping styles have been shown to be effective in reducing psychological distress within the general population as well as for those in the mental health professions (Norcross, 2000: Pope & Vasquez, 2005; Skovholt, et al., 2001). Studies have suggested that practitioner utilization of self-care or positive coping strategies can help reduce burnout (Skovholt, et al., 2001), mitigate impairment (Barnett, Baker, Elman, & Schoener, 2007), and increase professional functioning (Barnett & Cooper, 2009). Training programs for mental health professionals such as psychologists or counselors generally include learning about coping skills and self-care strategies beneficial for reducing clients' distress levels. However, being trained to help clients recognize and manage distress does not guarantee that mental health professionals recognize or manage their own distress. While it seems reasonable that professionals would apply their training towards reducing their own distress, research tends to suggest that many professionals fail to do so (Barnett, et al., 2007).

### *Self-care and stress*

While the term self-care is often used, it is not often clearly defined. This may be due to the fact that the term is somewhat self-evident (taking care of one's self) and the methods used may be as varied as the people who utilize them. However, self-care runs on a continuum



ranging from simply being able to dress or bathe oneself to being able to engage in behaviors which act as stress reducers or increase physical health. The best general description I found in the literature was offered by Holt and Treloar (2008), who stated that “self-care is a normal, routine set of practices which may become more important for people when they are suffering from ill health or participating in challenging or long-term treatment” (p.429). While the authors were referring to self-care related to clients, this definition also suggests that certain situations require a higher level of self-care, a concept that could be applied in employment situations. In other words, it seems reasonable that individuals working in challenging fields such as mental health would find that self-care is more important to their well-being than other fields. This definition captures the essence of self-care as a part of life which is important to successfully managing emotionally and physically stressful situations. It is also important to note that some self-care strategies can be dysfunctional while others are more functional and that strategies may be functional in one situation, yet be dysfunctional in another situation. For example, treating oneself to ice cream after completing a large assignment is more functional than eating ice cream every night to deal with stress.

Self-care can be broken down into general categories that apply to most people and each category consists of specific activities that vary depending on the individual. O’Halloran and O’Halloran (2001) propose four general categories: *biobehavioral* which includes activities intended to enhance physical care, *affective and cognitive* strategies that anticipate and plan for stressful situations, *relational* which includes developing interpersonal support systems, and *spiritual* activities which enhance the feeling of being connected to a higher power. While each of the four categories contains unique characteristics, some self-care activities may combine two or more categories. For example, attending a potluck at church could meet the physical need of

hunger, the relational need of interacting with other people, and the spiritual need of praying before eating, while exercising on the treadmill at home would meet a physical need only. Being aware of the potential for overlap gives the option to meet multiple needs in one setting rather than multiple settings. Busy individuals, such as mental health professionals, who experience stress but do not have much time to engage in self-care, could take advantage of the overlap to maximize self-care benefits while minimizing the time spent.

Self-care must be seen as a process between an individual and the surrounding environment. Skovholt et al, (2001) suggest that professionals can create a healthier work environment by creating a professional greenhouse. In other words, it is important to remember that part of our healthy growth comes from what we choose to put in our work space and that we should, therefore, select things that feel supportive or remind us to be good to ourselves. There is also value in understanding that as the individual and environment shift, self-care strategies used also need to shift. Pope and Vasquez (2005) suggest that self-care strategies be seen as a basic principle that drives professional decisions such as office location, outsourcing billing, or determining how many hours to work each week.

In 2000, John C. Norcross noted the lack of systematic research related to practicing self-care while working as a therapist so he wrote an article listing 10 strategies for self-care. The following list of strategies was based on a combination of research and those strategies being used by practitioners. The first strategy is to recognize the hazards of psychological practice. Norcross (2000) suggests that this awareness can reduce stress by providing the realization that practicing psychotherapy is stressful for most practitioners. Next, he suggests that thinking in terms of strategies rather than specific techniques or methods provides a broad base of options and is less limiting. Third, he states that self-awareness and self-liberation are two qualities that

have ranked high as contributing to functioning well. Next, he notes that using multiple strategies from different theoretical orientations is more useful than having a specific technique. This is based on research indicating outcome differences between various self-change strategies; yet, the effect of an individual strategy is modest. The fifth suggestion is to use stimulus control and counterconditioning whenever it is feasible. He notes that while practitioners are frequently good at maintaining boundaries, these same practitioners fail to take into account the environmental conditions which hinder or help effectiveness and job satisfaction. Norcross (2000) also recommends that therapists use strategies such as relaxation or exercise which have been shown to be effective with mental health professionals. He suggests that practitioners “Harness the subtle but pervasive power of the environment to replenish yourself.” (p. 711) rather than letting the environment drain your energy. For some this might involve decorating an office in soothing colors while others might pay a service to do their billing. Because developing and maintaining a career as a mental health professional requires a lot of focused attention and energy it makes sense to use resources in the environment to manage items that feel draining. The next strategy is to emphasize the human element, noting that for psychotherapists there is a link between the amount of time spent in helping relationships and the amount of self-care practiced. The seventh suggestion is to seek personal therapy, noting that over half of the psychotherapists use the service they provide after completing their training and that over 90% of them were pleased with the outcome. He states that studies have consistently found that therapists value personal therapy as a form of self-care. The next suggestion is to avoid wishful thinking and self-blame because they tend to increase rather than decrease stress levels. The ninth strategy is to diversify professional activities by seeing different client populations; teaching, supervising, etc. and to balance those activities with personal needs. And finally, Norcross reminds us to appreciate the

rewards of being a practitioner. He noted research suggests that practitioners report being more satisfied and feel that their work has a positive influence on others when compared to researchers.

Regardless of whether an individual is a graduate student, just beginning a career, or is well established in a career, time for self-care is often sacrificed or seen as expendable. Implementing self-care strategies often requires time, which can be problematic when establishing or maintaining a practice, honoring commitments outside of work or during graduate school. The attention given to training focused on the benefits of using self-care and positive coping strategies suggests that lack of knowledge is unlikely to be a reason that many professionals do not utilize these strategies. It is possible that motivation and perception of coping skills or self-care as being applicable or not applicable might contribute to how often they are applied on a personal level.

Coster and Schwebel (1997) defined well-functioning as an “enduring quality in one’s professional functioning over time and in the face of professional and personal stressors.” p. 5. They conducted two studies in which they examined the self-care strategies and stressors experienced by licensed psychologists specializing in clinical, counseling, or school psychology to determine which factors the psychologists believed contribute to well-functioning. The first study involved open-ended interviews of six psychologists who were aware of the purpose of the study. Interview times ranged from 1 ½ to 2 hours in length and were conducted by the second author. The following ten themes of self-care emerged from the data analysis and are ranked from those perceived as most important to those reported as least important: peer support, stable personal relationships, supervision, a balanced life, affiliation with a graduate department or

school, personal psychotherapy, continuing education, family of origin, costs of being impaired, and coping mechanisms.

In the second study done by Coster & Schwebel (1997), questionnaires were sent to 950 licensed members of the New Jersey Psychological Association selected at random. The sample consisted of 169 men, 168 women, and 2 unidentified gender individuals who returned questionnaires and met study qualifications. The packets consisted of a demographics questionnaire, Impairment Questionnaire (ImpQ) designed for a previous study done by Schwebel, Bernstein, Brady, and Lewis (1986, as cited in Coster & Schwebel, 1997), and the Well-Functioning Questionnaire (WFQ). The ImpQ consists of 11 ways that a psychologist's professional functioning could be impaired and respondents indicate if they have directly experienced, heard of other experiencing, or know others experiencing each of the 11 categories. Those who reported direct experience were asked to elaborate on current levels of impairment as well as type of strategy used to resolve impairment. The WFQ was designed by the researchers to assess beliefs of practicing psychologists using a Likert scale ranging from 1 (little or none), 3 (somewhat), to 5 (greatly) for 29 items which could contribute to well-functioning. Items were grouped into six categories: prelicensing, postlicensing, practice management, relationship, lifestyle, and intrapersonal. The top seven items participants reported as contributing to well-functioning were: self-awareness/self-monitoring, personal values, preserving a balance between personal and professional lives, relationship with spouse/partner/family, vacations, relationships with friends, and personal therapy. Results of both studies suggest that self-care is perceived as a crucial component of well-functioning for therapists, and that therapists found self-care to be both valuable and a behavior that they engaged in. However, the study does not address questions related to where therapists learned about the value of self-care and whether the

strategies used have remained the same throughout their life or if they have changed during their educational or professional journey. It would be interesting to determine how graduate training and being a practitioner relates to type or amount of self-care practices. This would improve the understanding of different strategies that are effective for different individuals as well as guiding how to implement self-care during training or for a seasoned professional. Finally, all three didactic items ranked low and were not perceived as being important towards being a well-functioning psychologist, suggesting that impairment may be related to the lack of adequate coping resources to effectively manage stress rather than to a deficit of professional skills.

Peters (2008) did an extensive study investigating factors that contributed to healthy functioning for graduate students. Participants were full time doctoral students in psychology as well as doctoral students in other departments. Of the 472 potential participants, 110 completed the first round of data collection and 30 completed the second round. Part of the study included collecting cortisol samples, and the author suggests that the collection process may have contributed to the low number of participants in the second round of data collection. Peters (2008) found a significant negative correlation between self-care and perceived stress, supporting the hypothesis that incorporating regular self-care strategies could lead to a decrease in perceived levels of stress which could, in turn, lead to better health. Stress levels were measured using the Perceived Stress Scale (PSS; as cited in Peters, 2008) and self-care was measured with a section of The Occupational Stress Inventory (OSI) titled Personal Resources Questionnaire (PRQ; as cited in Peters, 2008). The author suggests that encouraging students to implement self-care practices during graduate school could reduce overall rate and severity of illness during their time in the program. The author also hypothesized that those students enrolled in psychology graduate programs would use more self-care practices than students enrolled in other fields due

to likely exposure to the topic of self-care as part of their education. Results appeared to confirm the hypothesis but were not statistically significant. Including students from multiple majors in the study increased the probability of these results being more generalizable to graduate students at large and perhaps undergraduate students as well. Limitations include the high proportion of females to males in the sample and the skewed age distribution of the sample, in that most of the participants were under 35 years of age.

Shapiro, Brown, & Biegel (2007) performed a study evaluating the effects of Mindfulness-Based Stress Reduction (MBSR) for therapists in training. The sample consisted of students enrolled in a master's level counseling psychology program at a small private Jesuit university. Students were recruited from three graduate classes on the first day of the semester. Out of 83 possible participants, 64 agreed to participate, and 54 students completed both the baseline measure and the post-course measure. Only the data from those completing both measures were included in the results. The population was mostly female (88.9%), enrolled in their first or second year (56.9% and 29.4%) with an average age of 29.2 years ( $SD = 9.07$ ). The majority were Caucasian (76.9%) followed by Latina/Latino (7.7%), Asian (5.8%), Filipino (3.8%), African American, Portuguese, Persian each at 1.9%, and 3.8% declined to provide their race or ethnicity. The study was a prospective, cohort-controlled design with the MSBR offered as a component of the one of the three classes that participants were recruited from. Measures used included the Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003 as cited in Shapiro et al., 2007), the 20-item version of the Positive and Negative Affectivity Schedule (PANAS; Watson, Clark, & Tellegen, 1988, as cited in Shapiro et al., 2007), the 10-item Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983, as cited in Shapiro et al. 2007), the Reflection Rumination Questionnaire (RRQ; Trapnell & Campbell, 1999 as cited

in Shapiro et al., 2007), and the 26-item Self-Compassion Scale (Neff, 2003 as cited in Shapiro et al., 2007). Demographic information was obtained during the first week of class and all other measures were administered during the first and ninth week of classes. No significant differences were found related to gender or between the two control groups in preliminary analyses.

Analyses indicated that 70% of the control groups were in their first year of classes compared to 38% of the MSBR participants. Results suggested that those students in the MSBR program reported higher levels of positive affect and self-compassion along with lower levels of perceived stress, negative affect, state and trait anxiety, and rumination. Obtained results support the authors' hypothesis that enrolling in an MSBR program would improve graduate counseling psychology students' mental health. There were several limitations. The study was not a randomized trial preventing controlling for factors such as the motivation for choosing to take the MSBR course, which was required for a minor in health psychology, while the control classes were required for the general MA in counseling. The sample sizes were relatively small, mostly female, and all of the participants were from a small private graduate program which limits generalization to other populations. Future studies could evaluate if the effects of MSBR maintain over time and how MSBR training might affect training students in a clinical setting.

Most graduate psychology programs place students in situations with high expectations and high stress levels as part of the process of becoming a professional. Unfortunately, program and career expectations may be in direct conflict with good self-care practices, placing individuals in a position of sacrificing self-care to obtain short term benefits such as earning good grades or prioritizing client care; however, sacrificing self-care in the long term may contribute to increased stress, burnout or depression. There seems to be a lot of evidence indicating that self-care is beneficial for people in general and may be especially beneficial for



students and professionals in the mental health field. It has been demonstrated that being a psychologist is inherently stressful as is being a graduate student and that certain self-care strategies have been shown to be effective in reducing stress levels which helps support a higher level of overall functioning. Results of research studies in this area indicate that implementation of self-care strategies as part of graduate training is beneficial and may act as a preventive factor for impairment later in the career. Furthermore, studies have demonstrated that self-care can act as a preventive measure for depression and may reduce the duration of number of illnesses. However, no studies to date have examined changes in self-care over time to determine how these strategies might develop or are maintained over the course of graduate school or during the career. It is important to determine both how self-care strategies are developed and implemented as well as determining when self-care strategies are developed or changed over the long term.

### *Coping and stress*

The APA Dictionary of Psychology (2007) defines coping as “the use of cognitive and behavioral strategies to manage the demands of a situation when these are appraised as taxing or exceeding one’s resources or to reduce the negative emotions and conflict caused by stress.” (p. 232) This definition implies that individuals use thoughts and behaviors in order to manage stressful situations or situations that are perceived as situations in which they lack control. However, it is important to make a distinction between adaptations, which are responses that are automatic, versus coping, in which responses are done with conscious awareness. Shields (2001) defines coping as reactions which use “psychosocial mechanisms to deal with an event to which the individual has not adapted, and they involve a conscious effort.” (p. 66) Because coping involves conscious choice, the type of coping strategy employed will vary depending on the type

of situation and the beliefs of each individual regarding what coping strategy will be most effective in that particular type of situation.

Some coping strategies are believed to be more functional such as determining possible solutions to the problem, seeking support during a stressful situation, or accepting that some circumstances are not in our control. Other coping strategies are seen as being more dysfunctional. For example, denying that a problem exists or engaging in excessive substance use would be seen as dysfunctional coping strategies. Folkman and Lazarus (1980) distinguished two general types of coping styles: problem-focused coping in which the individual attempts to target the problem directly in order to relieve the stress, and emotion-focused coping in which the individual attempts to decrease the emotional distress that results from a situation. Generally speaking, problem-focused coping strategies are seen as positive ways of reducing stress; however, the interaction between the situation, individual, and strategy must also be taken into account. Individuals use a variety of coping strategies to address psychological distress related to life stressors.

When Carver, et al. (1989) were developing the COPE scale, they initially reported 14 primary coping strategies with four different higher-order factors including: task, cognitive, emotional, and avoidance. However, later studies including Hasking and Oei (2001) support three different higher-order factors including: task, emotional, and avoidance. Individuals using task-focused coping strategies generally emphasize behaviors that involve taking action in order to create changes in the problem situation while those individuals using emotional-focused coping strategies tend to emphasize behaviors that modify emotions that result from the problem situation. Individuals using avoidance-focused coping strategies generally emphasize behaviors which involve denial or disengaging from the problem situation. Usually, task-focused and

emotion-focused coping strategies are seen as positive adaptations while avoidance-focused coping strategies are seen as negative adaptations. “However, all types of coping strategies have been found to moderate stressful experiences.” (Dwyer & Cummings, 2001, p. 211).

Dyson & Renk (2006) performed a study to determine the relationship between stress levels and the type of coping strategies used by freshman during their first year at a university. The population consisted of 74 college freshman (23 men and 51 women) ranging from 18 to 22 years of age ( $M = 18.47$ ,  $SD = .71$ ) who were enrolled at a southeastern university. The majority of the participants were Caucasian (62.2%) followed by Hispanic American (17.6%), African American (10.8%), Asian American (5.4%), and other (4.1%). Most respondents were single (90.5%), lived away from home (75.7%), and received full financial support from their parents (66.0%). There was no significant difference between male and female participants in levels of stress related to college or the type of coping strategies they used. For male participants, masculinity correlated significantly with levels of problem-focused and emotion-focused coping strategies while femininity correlated with levels of emotion-focused and avoidant-focused coping. For female participants, masculinity only correlated with levels of problem-focused coping and femininity correlated with problem-focused and emotion-focused coping. The authors performed a series of regression equations to determine how student characteristics such as sex, masculinity, femininity, level of depressive symptomology, family life-change stress, and college change stress related to type of coping strategy used. Results indicated that college students' characteristics significantly predicted the type of coping strategy used,  $F(6,67) = 3.33$ ,  $p < .001$ . Specifically, those students with higher levels of masculinity ( $r = .35$ ,  $p < .002$ ) were more likely to report using problem-focused coping while those students with higher levels of femininity were more likely to report using both problem-focused coping ( $r = .37$ ,  $p < .001$ ) and

emotion-focused coping ( $r = .40, p < .0004$ ). Student characteristics and stressors were not significant predictors for using avoidant-focused coping. Study limitations include the ratio of men to women in the small sample and the homogeneity of the sample as related to ethnicity, marital status, and parental support. Additionally, the data was based on participant self report, which may be inaccurate or biased.

Matheny, Ashby, and Cupp (2005) performed a study evaluating gender differences in the relationship between stress, coping, and illness of students enrolled in graduate programs in business or education at a large urban university in the southeast. The sample population age range was 21 to 56 with a mean of 27.9 for men and 29.8 for women. About 33% were married, 53% were employed full-time, and 27% were employed half-time. As expected, results indicated that those students using more effective coping strategies were less likely to be in the high-illness group. Discriminant function analyses by gender produced two different models for men and women. Coping resource effectiveness was negatively correlated with illness for both genders, suggesting that insufficient coping resources may contribute to increased vulnerability to illness. However, study results found that women had both higher coping resources and higher illness rates than men. The authors of the study were unable to resolve this contradiction, but suggested that for women illness itself may be a coping resource which allows them to take care of themselves or, alternately, that it may be less acceptable for men to appear weak. Limitations include the use of self-report measures with volunteer graduate students who may not be representative of undergraduate students or the general population.

In 2001, Dwyer and Cumming performed a study evaluating correlations between stress and type of coping strategies used by undergraduates completing a compact 5<sup>th</sup> year education degree at a large Canadian university. The study included 75 students (54 women, 21 men)

ranging from 22 to 48 years of age with a mean of 29 years of age. The authors hypothesized there would be a positive correlation between perceived stress levels and the use of coping strategies. Significant correlations were found between the number of coping strategies used with frequency of stress ( $r = .48, p < .01$ ) and degree of stress ( $r = .42, p < .01$ ) suggesting that students with higher perceived levels of stress were using more coping strategies overall than students with less perceived stress, providing support for this hypothesis. An additional hypothesis was that there would be a negative correlation between stress levels and using problem-focused or emotion focused coping strategies; and a positive correlation between stress levels and the use of avoidance-focused coping strategies. There were no significant correlations for problem-focused and emotion-focused coping strategies with frequency and degree of stress, but there was a significant positive correlation between avoidance-focused coping strategies with frequency and degree of stress ( $r = .39, p = .01$ ). These results appear to support the authors' hypothesis that stress levels would be higher for those students using avoidance-focused coping strategies but did not appear to support the hypothesis that stress levels would be lower for those students using problem-focused or emotion-focused coping strategies. Some of the study's limitations included the use of a forced-choice format in the self-report measure and the use of a non-clinical sample who may have been experiencing less stress than a clinical sample. Further, none of the measures accounted for physical or physiological symptoms that may have contributed to stress,

Kariv and Heiman (2005) performed a study examining the relationship between perceived stress and coping strategies in college students. The stratified sample consisted of 283 students enrolled in national universities and colleges in Israel whose participation was voluntary. The population included 153 women, 119 men, and 4 who did not identify gender

ranging from 20 to 61 years of age ( $M = 30.13$ ,  $SD = 6.78$ ). Over half of the respondents reported being married (63.3%) and 61.1% reported not having children. T-tests indicated there were no significant differences among the sample by gender ( $t = -0.55$ ,  $F = 1.19$ , and  $p > 0.05$ ) or age ( $t = -3.26$ ,  $F = 0.67$ ,  $p > 0.05$ ) so results are based on the group as a whole. The authors defined stress based on academic load which included: class hours, study hours during the semester, and study hours during finals. There was a significant negative correlation between perceived academic stress and task-oriented behaviors ( $r = -0.16$ ,  $p > 0.05$ ) and a significant positive correlation between perceived academic stress and emotion-oriented behaviors ( $r = 0.20$ ,  $p > 0.01$ ). While avoidance was positively correlated with academic stress, it was not significant. These results suggest that students who reported experiencing academic stress were more likely to use emotion-focused coping strategies than task-focused coping strategies. Based on these results, the authors performed hierarchical regression analyses to determine if academic load or academic stress would act as predictors in determining the type of coping strategy used. The results were significant, suggesting that students used task-oriented coping in the beginning to manage their academic load and then switched to emotion-oriented coping to manage their perceived academic stress. Additional results suggested that older students preferred to use task-oriented coping strategies to other strategies and that males tended to use avoidance-oriented coping more than females. Possible limitations include the use of self-report measures and that academic institutions were selected by non-random convenience sampling.

In 1998, Toray and Cooley performed a study evaluating differences in coping strategies used by female students at a small liberal arts college during their first final exam week with coping strategies used by upperclass students (juniors and seniors) during finals week. Participants included 191 first year students recruited from residence halls and 80 upperclass

students recruited from upper division psychology classes. No other demographics such as age, marital status, etc. were provided. Discriminant analysis indicated significant differences between the groups, in that first year students tended to use more distancing techniques and self-isolation than upperclass students, who tended to use more problem-focused techniques. The authors noted that the distancing scale could be considered an avoidant-focused coping strategy and that the problem-focused scale would be considered an active coping strategy. Study limitations include the fact that all participants were female, the entire upperclass group came from psychology classes, and the use of self-report measures.

Shields (2001) preformed a study evaluating the relationship between stress, active-coping, and academic performance for students who withdrew after fall semester versus those who completed fall and winter semester. Data for this study were drawn from a broader study evaluating student satisfaction. Participants consisted of 1,247 students enrolled at the University of Missouri: Saint Louis during May and June of 1995. Students were interviewed by phone with a response rate of 51%. The sub-population of this study consisted of 220 students enrolled during both semesters and 110 students who withdrew after fall semester. The combined response rate for both groups was 43%. Due to small numbers of minority students (8%) in the “persisters” group (the students who enrolled for both semesters), African American students were eliminated from the analyses. The authors noted that comparison studies between the African American sub-group and other student groups found significant differences in help-seeking behavior, indicating a need to perform separate analyses by race. Active coping was determined by the number of attempts to seek out help and information for needs relating to school. Participants were asked how often they sought out help during the last academic year for 21 specific school-related services. Stress levels were determined by asking students to rate how

stressful they found college on a scale of 1 to 10. The average age in years for persisters was 30.72 with a standard deviation of 8.21 and the average age for non-persisters was 34.29 with a standard deviation of 9.31. Forty eight percent of the persisters were male, 83% were employed, and 44% were married. Of the non-persisters, 39% were male, 92% were employed, and 53% were married. Researchers hypothesized that higher levels of stress would be correlated with higher use of active coping strategies for the persisters than the non-persisters which was supported by the results. There were no significant differences for gender or marital status; however, there were significant differences group differences for age, with persisters more likely to be younger and less likely to be employed. Results suggest that those students who completed both semesters experienced higher levels of stress and were more likely to use active-coping strategies such as seeking out information or social support. It is possible that non-persisters' response to stress was to withdraw from school; however, the author notes that the non-persisters were also more likely to be non-traditional students, suggesting that demands related to other life areas may be contributing factors. One interesting result was that among persisters, older students were more likely to use active coping strategies than younger students but there was no difference between older and younger students for the non-persisters. The study was limited by the use of retrospective measures for stress and coping and the use of college students which may not generalize to other settings. Future longitudinal studies would be needed to attempt to establish causal connections between perceived stress and coping and to determine whether stress is perceived as a threat or challenge.

Cushway and Tyler (1996) summarized the results from a series of studies of British clinical psychologists which evaluated stress levels and coping styles. The measure used in all studies was the General Health Questionnaire-28 (GHQ-28) (Goldberg, 1978 as cited in



Cushway & Tyler, 1996) which is designed as a research tool and has four distinct scales.

Results suggest that among clinical psychologists and clinical psychology trainees about 25% reported being 'very stressed' and about 50% reported being 'moderately stressed'. Additionally, the authors noted that the trainees reported experiencing higher levels of distress compared to other groups and suggest that stress levels may peak during training. There are also consistent findings that women report experiencing more stress than men. The authors suggest that this may be due to it being more acceptable for women to express distress or that it might be related to being single or partnered. While having a partner may act as a protective factor in providing someone to confide in, for some women this benefit may be offset by the multiple role strain.

The main coping strategies Cushway and Tyler (1996) found effective for clinical psychologists was talking with a friend or peer. The most frequent methods reported were active-behavioral such as talking with friends or being involved in activities outside of work or active-cognitive methods such as problem-solving or planning. The researchers also found a positive relationship between psychological distress and avoidance coping but suggested that this may be a positive rather than negative strategy, especially in situations that cannot be solved. Factor-analysis of the data collected from clinical psychologists suggested that the seven factors accounting for 55% of the variance included: 1) Professional self-doubt (17.6%), 2) home-work conflict (10.6%), 3) organizational structure and processes (9.2%), 4) relationships and conflicts with other professionals (5.4%), 5) workload (5.0%), 6) lack of resources (4.0%), and 7) client/patient related difficulty (3.4%). These seven factors were fairly consistent with factors from a scale under development by Cushway, Tyler, and Nolan (1996) which was designed to measure stress in mental health professionals. Interestingly, 'professional self-doubt' is not

reported as often in those professionals who are not in the mental health fields suggesting that conducting therapy is in itself stressful and emotionally demanding.

These studies are valuable in that they provide information regarding what type of coping behaviors individuals use during specific situations; however, it was not clear for the studies involving college students whether individual behavior was representative of a behavior change based on being in college or if they were representative of a previously established behavior. Without a baseline of self-care or coping strategies, it is impossible to determine whether or not functional or dysfunctional strategies might be developed during graduate school, developed prior to graduate school, or a combination of both. People's behavior in stressful situations relates to how individuals perceive the situation and type of coping or self-care strategies they use. Situations that are a stressor for one individual may not act as a stressor for another individual because it is the perception of the situation rather than the actual situation that determines what action will be taken.

The goal of this preliminary study is to obtain information regarding how self-care and coping behaviors relate to perceived levels of stress for graduate students during their first semester of a doctoral program in Clinical Psychology or master's program in Counseling Psychology. Establishing a baseline is necessary to answer questions related to how self-care strategies and coping styles relate to behaviors established prior to program entry or if self-care and coping strategies develop as part of the process of being a graduate student.

#### *Purpose of the current study*

The immediate purpose of this study is to increase understanding of the coping strategies and self-care practices students are using and how those practices relate to their stress levels. Hopefully, this knowledge could then be used to evaluate deficits as well as strengths to address

during training. Preventative interventions could be tailored to meet each student's level and or type of self-care and coping strategies. For example, students entering a program as a single parent new to the area are likely to have different coping strategies than students entering a program in the area in which they already live or in which they grew up. And, within each group, the individual's coping style can be used to determine the most effective interventions.

Establishing a baseline allows for statistical analysis of those individuals who begin graduate school with good self-care levels who are then able to maintain those habits during the course of their education. This understanding could provide information regarding what factors may be protective ones which may then be applied in ways that increase more individuals' abilities to maintain good self-care as they progress through the program. It may also provide a means to identify and intervene with individuals at higher risk for not practicing good levels of self-care.

This study attempts to provide some answers related to how stress levels relate to perceived stress and coping strategies of students during the first term of a doctoral program in Clinical Psychology or a master's program in Counseling at a private liberal arts university in the Northwest. Entering graduate training is a stressful experience and gaining a better understanding of how specific behaviors interact with stress levels could help determine effective interventions for this population. And, establishing a baseline for students just entering will allow more accuracy in future studies to determine if poor self-care and coping strategies develop over time as a result of graduate program expectations, if those strategies are already in place prior to beginning the program, or if they are related to the personality type of those individuals attracted to this type of work. Having these answers could help create changes within these types of programs to encourage or support the use of positive coping strategies or self-care by the students.

The first hypothesis of this study is that those students engaging in regular self-care in one of three areas: physical activities, social activities, or spiritual or religious activities will report lower levels of stress than those students not engaging in any self-care activities. It is expected that higher scores on a measure of self-care practices will be negatively correlated with scores obtained on a measure of perceived stress. In other words, as the amount of time spent during the week doing self-care activities increases, the levels of perceived stress will decrease.

The second hypothesis of this study is that those students engaging in task-focused coping strategies will have lower levels of stress than those students engaging in emotion-focused or avoidance-focused strategies. It is expected that there will be a negative correlation between scores on a measure of task-focused coping and scores on a measure of perceived stress and that there will be a positive correlation between scores on a measure of perceived stress and measures of emotion-focused and avoidance-focused coping.

## **Method**

### *Participants*

Participants consisted of graduate students who were enrolled in their first semester of the doctoral program in Clinical Psychology or the master's program in Counseling Psychology at Pacific University School of Professional Psychology (SPP). The total potential population included 90 students: 50 from Clinical Psychology and 40 from Counseling Psychology. A total of 67 students elected to participate in the study, for a response rate of 74%. Comparing demographic information between the sample and the total student population at Pacific SPP indicates the sample was generally representative of the total population. Although the total population was approximately 80% women and 20% men, the 63 participants completing the demographics questionnaire were 84% women and 16% men. Four participants chose not to

complete the demographics questionnaire and were excluded from the above percentages. If all participants who did not provide information were women, it would be important to note that the sample may be even more skewed toward females than the student population in general. The most common age groups were those aged 18-24 years (35) or 25-29 years (21) with the two combined making up 88% of the sample population. The remaining 12% of the population were aged 30-54 years (7) or declined to answer (4). See Table 1 for more details. Approximately 25% (16) of the participants had either completed a masters degree or prior graduate coursework and, of those, 88% (14) had completed the coursework or degree within the past 5 years.

Table 1

*Demographic Characteristics of the Sample*

Characteristic	n	%
Gender		
Male	10	17
Female	48	83
Other	0	0
Age (years)		
18-24	30	51
25-29	21	36
30-35	5	8.6
36-44	1	1.6
45-54	1	1.6
Above 55	0	0
Relationship Status		
Not Partnered	21	36
Partnered	16	28
Partnered Living Together	19	33
Other	2	3
Highest Prior Degree		
Bachelor's	44	76
Some Graduate Coursework	5	8.6
Master's/Doctoral	9	15
Degree Completed < 5 years ago	47	81

*Note.* Participants with unknown status (n=4) not included.

*Measures*

Measures used in the study included: the Perceived Stress Scale (PSS; Cohen & Williamson, 1988), the COPE (Carver, Scheier, & Weintraub, 1989), a Self-Care Questionnaire (SCQ), and a Demographics Questionnaire (DQ). The following paragraphs provide detailed descriptions for each measure.

*Perceived Stress Scale (PSS)*

The Perceived Stress Scale (PSS; Cohen & Williamson, 1988) was chosen because it is a measure of stress with questions that are general in nature rather than having content which relates to a particular population or specific type of stress. The PSS includes 10 items on a 5-

point Likert scale inquiring how often the participant has engaged in certain behaviors over the past month. Examples of items include: a) In the past month, have you felt that you could not cope with all the things you had to do; and b) In the past month, how often have you felt that you were on top of things? Use of the PSS is appropriate with a general community population whose educational level is junior high and above. Reported normative psychometric data for this scale were collected from a sample that was younger, more educated, and less racially diverse when compared to the general population, but was fairly representative of the sample population in this study. The PSS has an alpha coefficient of .78 (Cohen & Williamson, 1988), internal consistency ratings between .84 and .86 (Roberti, Harrington, & Storch, 2006), and a test-retest reliability of .85 (Roberti, et al., 2006). Pearson product-moment correlations between the PSS-10 and the State-Trait Anxiety-Inventory(STAI)were analyzed, with high correlations between the PSS-10 and the STAI Total Score, STAI-A, and STAI-D factors indicating convergent validity (Roberti, et al., 2006). Predictive validity of the PSS for depressive symptoms has been cited between .65 and .76, for physical symptoms between .52 and .65, and for social anxiety between .37 and .48 (Roberti, et al., 2006). The PSS appears as Appendix A.

### *COPE*

The COPE (Carver, et al., 1989) was used to determine what type of coping mechanisms participants report utilizing during periods of stress. The COPE was chosen because it measures a broad range of coping responses and includes coping styles expected to be functional as well as those expected to be dysfunctional. The COPE is a general measure created for use with a variety of populations. The instrument consists of 60 items on a four-point Likert scale. Examples of items include: a) I turn to work or other substitute activities to take my mind off things; b) I discuss my feelings with someone; and c) I pretend that it hasn't really happened.

Participants rate to what extent they engage in each coping mechanism with results being grouped into 15 different coping scales. Subcategory groupings for the scales are often used, including the 3-factor model consisting of task or problem coping, emotional coping, and avoidant coping, and the 4-factor structure consisting of active, cognitive, emotional, and avoidant coping (Hasking & Oei, 2002). Using the higher-order factors instead of the different coping scales can be more robust and offer similar information. Hasking & Oei (2002) obtained results supporting the 3-factor model, but the 4-factor model was not supported.

The average Cronbach alpha reliability coefficient for the various scales is .71 (Carver, et al., 1989). Test-retest reliability ranged from .42 to .89 after a 6 week period and from .48 to .86 after an 8 week period in a sample of college level students (Carver et al., 1989). When the COPE was compared to other coping measures, a measure of personality, and a measure of social desirability, it was found to have both appropriate discriminant and convergent validity (Carver, et al., 1989). The COPE appears as Appendix B.

#### *Self-Care Practices Questionnaire*

This questionnaire was designed by the principal investigator to collect information related to self-care strategies participants used during their first term of graduate school in the Clinical Psychology or Counseling Psychology program at Pacific University. Self-care is a broad topic and effective strategies for one individual may not be effective for another individual. Specific activities were congregated under general categories such as physical activity, social activity, or religious/spiritual involvement in order to narrow the broad range of possible self-care activities into more manageable categories. The Self-Care Practices Questionnaire appears as Appendix C.

#### *Demographics Questionnaire*



Demographics collected included age, gender, relationship status, and prior graduate education or degrees earned. The data collected for age and gender were used to determine how typical the study sample was compared to the graduate student population in general. Relationship status was collected in order to control for potential effects on how participants handle stressful life situations. Information regarding prior graduate education or degrees earned was collected in order to determine what, if any, differences might exist between those individuals entering the program with previous graduate school experience compared to those individuals entering the program without previous graduate school experience. Given the small proportion of non-Caucasian students typical of cohorts in the Clinical Psychology and Counseling Psychology programs at Pacific University, the investigators chose not to include ethnicity as a demographic variable due to the increased risk of any specific participant being identifiable. The Demographics Questionnaire appears as Appendix D.

### *Procedure*

Participants were recruited by the principal investigator from specific class sections required for most students during the first term of the doctoral program in Clinical Psychology and the masters program in Counseling Psychology at Pacific University. Some doctoral students were identified as advanced standing at admission due to prior graduate education. Because program requirements varied for these students based on prior coursework, the principal investigator also recruited participants from a specific class which was limited to advanced standing students. This process created some recruitment overlap; however, this also ensured that all of the advanced standing students were aware of the opportunity to participate in the study.

The principal investigator collected data in the third and fourth weeks of the fall semester of 2009. The timing of data collection was chosen because participants would have had enough time to be oriented but were still new enough to the program to be in a period of adjustment.

Instructors for each class were contacted by the principal investigator requesting permission to attend each of the specific classes to solicit volunteers. Recruitment was done at the end of class time in order to minimize interference with lecture and to maximize the number of participants able to complete the questionnaire packet and return them to the principal investigator at that time. During recruitment, it was emphasized that participation was voluntary, that information obtained would be kept confidentially, that participating or not participating would not influence status in the program, and that participants could withdraw from the study at any time without consequences. Students agreeing to participate were given two copies of the informed consent form. Participants were directed to read the informed consent prior to returning one signed copy to the principal investigator. Participants retained the second copy for their records. Once the principle investigator received the signed informed consent, the participant was provided with an envelope that contained the four measurement instruments along with a blank envelope in which the participants placed the completed measures in prior to returning them to the principal investigator. Because no identifying information or code numbers were given to questionnaire packets at the time of data collection and because all of the completed packets were merged together prior to being assigned a code for data entry, participant confidentiality was protected. No one, including the principal investigator, was able to link specific questionnaires to a specific participant or even to a specific program.

## Results

Scores obtained on the PSS suggest that, in general, all participants perceived themselves as being stressed sometimes during the previous month. Each of the 10 questions is assigned a value of 0-4 points with the maximum total score being 40 points. Scores in the middle range around 20 suggest moderate levels of perceived stress while scores around 10 suggest low levels of perceived stress. The higher the scores are, the more the individual perceives himself or herself to be stressed. Scores from this sample population, ( $M = 15.82$ ,  $SD = 6.88$ ) suggest that in general, participants reported that they had experienced stress sometimes during the previous month. These scores were lower than expected given that participants had just entered graduate school, which is often regarded as a stressful experience. It seemed reasonable to assume that individuals in this situation would report experiencing stress fairly often rather than sometimes.

Scores for the COPE were broken down into the 3 factor model advocated by Hasking and Oei (2002): task-focused coping, emotion-focused coping, and avoidance-focused coping. Higher scores on the COPE questionnaire indicated increased use of the particular coping strategy. Each question was assigned points ranging from 1-‘usually don’t do at all’, to 4-‘usually do this a lot.’ Scores for overall and sub-groups were obtained by adding up the points for the questions. The first sub-group titled Task-Focused consisted of 17 items whose coping strategies were active, involved planning, and suppression of competing activities. The maximum possible score for the Task-Focused subgroup was 68. The mean of 39.69 and standard deviation of 3.76 suggest that, in general, participants in this study appear to use many task-focused coping strategies. This makes sense given that many of the behaviors contained within this category such as coming up with a strategy about what to do or not getting distracted by other activities would also be useful behaviors to get into graduate school.

The second sub-group titled Emotion-Coping consisted of 12 items whose coping strategies were related to social activities and venting emotions. The maximum possible score for this sub-group was 48. The mean of 29.45 and standard deviation of 3.20 suggest that, in general, participants in this study appear to use many emotion-focused coping strategies. Use of emotion-focused coping strategies makes sense in this population because part of the graduate school experience involves getting to know your cohort as you begin to work together. This style of coping may directly relate to the sharing or venting of common experiences that occur during graduate school with other people as a way of normalizing feelings or experiences.

The third sub-group titled Avoidance-Coping consists of 16 items whose coping strategies were related to areas such as denial, disengagement, and religion. The maximum possible score for this sub-group was 64. The mean of 36.49 and the standard deviation of 5.12 suggest that, in general, participants in this study tend to use many avoidance-focused coping strategies. This suggests that for this particular group of individuals, one way of handling stress related to the adjustment into graduate school is to approach the situation as if certain aspects are not in existence or deliberately putting off thinking about some stressful aspects of graduate education.

The SCQ was designed to measure how often individuals had engaged in certain behaviors such as physical activities which relate to self-care. Because the SCQ asked individuals to state the number of times they participated in each activity during the week, there is not a maximum possible score. However, higher scores indicate higher levels of that particular type of activity during the week. The first category of the SCQ, titled Physical, asked participants to list the number of times they participated in physical activities such as working out at the gym, yoga, or getting enough sleep. On average, participants engaged in 12.99 physical activities

during the week with a standard deviation of 5.91. This suggests that at least during the early stages of graduate school, the participants were still actively engaged in activities that are related to physical well being. However, these numbers only indicate the amount of activity that was occurring at that time and do not indicate whether this level is consistent with activity levels previous to beginning graduate coursework. The results also do not indicate the participants' perception of the quality of activity or satisfaction with the quality or frequency of the activity.

The second category of the SCQ, titled Social, asked participants to list the number of times during the week they engaged in social activities such as going to a party, eating with others, or participating in electronic social networking. The mean of 16.34 and standard deviation of 15.16 indicated that students reported participating in social activities during the early stages of graduate school, but also that there was a very wide range of frequency for this category. It is possible that the type of social activity can be split into two groups; activities which involve students, family, and friends who live in the area, and those activities which involve interactions with families and friends who live elsewhere. Because some of the students are new to the area and do not know many people, it is likely that part of their self-care would involve talking with friends or family by phone or other electronic methods such as email, chat groups, or social networking sites.

The third category of the SCQ, titled Spiritual, asked participants to list the number of times during the week that they engaged in religious or spiritual activities. These activities ranged from formal activities such as attending a church function to less formal activities such as prayer or reading spiritual materials. Not surprisingly, given that religion and spirituality are highly personalized for individuals, there was a broad range of responses with a mean of 4.09 and a standard deviation of 7.55. This suggests that for some students, spirituality is practiced

more often during the week which could indicate that spirituality is important to them. The difference in the range may also be related to the limitations of activity type listed on the SCQ. While the measure also included the option to list activities under a category labeled as ‘other,’ it is possible that some information related to spiritual activities was not captured.

Analyses focused on the relationships between participants’ perceived levels of stress as measured by PSS scores, coping styles measured by COPE scores, and self-care strategies measured by SCQ scores. Correlations were run using SPSS, a statistical package designed to run analyses for social science studies to determine what, if any, relationships existed between these variables for the sample as a whole. Additional analyses were performed to evaluate how demographic characteristics such as gender, age, prior education, or relationship status might affect the relationship between perceived levels of stress and coping styles or self-care strategies.

PSS total scores were used for analysis to indicate general level of perceived stress. COPE results were grouped into the three factor model of task-focused, emotion-focused, and avoidance-focused coping proposed by Haskins and Oei (2002) for analysis by combining scores from specific questions related to each area. SCQ results were grouped into Physical, Social, and Spiritual categories for analysis. There were no significant correlations found between perceived stress levels and the three types of coping strategies or the three categories of self care. However, there were significant positive correlations found between the Spiritual self-care strategy grouping and Task-Focused coping,  $r(62) = .30, p < .05$ , and Emotion-Focused coping,  $r(62) = .34, p < .01$ . The three categories of the COPE also correlated significantly with each other, which is expected as each subscale measures the same underlying construct of coping. See Table 2 for details.

Table 2

*Summary of Correlations, Means, and Standard Deviations for Scores on PSS, COPE Subgroups, and SCQ subgroups (N = 62)*

Measure	1	2	3	4	5	6	7
1. PSS	--	-.02	-.10	-.04	-.04	.01	-.11
2. COPE-Task		--	.66*	.68**	.09	-.11	.30*
3. COPE-Emotion			--	.66**	.09	-.01	.34**
4. COPE-Avoidance				--	.19	-.20	.20
5. SCQ-Physical					--	-.09	-.09
6. SCQ-Social						--	-.01
7. SCQ-Spiritual							--
<i>M</i>	15.82	39.69	29.45	36.48	12.95	16.34	4.09
<i>SD</i>	6.88	3.76	3.20	5.12	5.91	15.16	7.26

\*  $p < .05$

\*\*  $p < .01$

Further analyses of perceived stress, coping style, and self-care strategies based on demographic characteristic revealed other significant findings. Interestingly, the significant correlation noted above between Spiritual self-care strategies and Task-Focused coping held true for females,  $r(48) = .41, p < .01$ , but not for males. No further gender differences were noted. See Table 3 for additional information.

Some differences were found for age, with a significant positive correlation between Social self-care strategies and Emotion-Focused coping,  $r(30) = .37, p < .05$  for students aged 18-24 years. Negative correlations were found between perceived stress and Emotion-Focused coping,  $r(21) = -.49, p < .05$ , and between Social self-care strategies and Avoidance-Focused coping,  $r(19) = -.45, p < .05$  for students aged 25-29 years, but not for other aged students. See Tables 4 and 5 for more details.

One significant correlation was found based on prior degree or graduate study, in that there was a negative relationship between Physical self-care strategies and Social self-care strategies,  $r(7) = -.87, p < .05$ , for participants who had completed a graduate degree less than five years before entering the current graduate program, but not for other participants. See Tables 6, 7, and 8 for additional information regarding prior degree or previous graduate study.

Relationship status yielded some significant findings. There was a positive relationship between Emotion-Focused coping and Social self-care strategies,  $r(19) = .56, p < .05$ , and between Task-Focused coping and Spiritual self-care strategies,  $r(19) = .51, p < .05$  for those students who indicated they were not partnered. For participants who indicated they were partnered, there was a significant positive correlation between Physical self-care and Avoidance-Focused coping,  $r(16) = .50, p < .05$ , and significant negative correlations between both Avoidance-Focused coping and Social self-care strategies,  $r(16) = -.55, p < .05$ , and Emotion-



Focused coping and Social self-care strategies  $r(16) = -.50, p < .05$ . For complete information regarding relationship status, see Tables 9 and 10.

Table 3

*Summary of Correlations, Means, and Standard Deviations by Gender for Scores on PSS, COPE Subgroups, and SCQ subgroups (N = 58)*

Measure	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
1. PSS	--	-.07	-.17	.01	-.07	.10	-.06	16.56	6.56
2. COPE-Task	-.28	--	.70**	.65**	.07	-.09	.41**	40.13	3.92
3. COPE-Emotion	-.10	.60	--	.70**	.03	-.05	.28	29.46	3.34
4. COPE-Avoidance	-.48	.83**	.30	--	.24	-.21	.13	36.81	5.06
5. SCQ-Physical	.09	.32	.52	.06	--	-.07	-.07	12.98	5.97
6. SCQ-Social	-.17	-.27	.25	-.45	-.34	--	-.10	16.23	15.84
7. SCQ-Spiritual	-.16	.38	.41	.17	-.24	.39	--	3.24	6.52
<i>M</i>	12.60	37.40	28.30	33.50	12.80	15.0	3.80		
<i>SD</i>	7.79	2.55	2.31	4.74	6.99	12.73	4.51		

*Note:* Intercorrelations for Female participants ( $n = 48$ ) are presented above the diagonal, and intercorrelations for Male ( $n = 10$ ) participants are presented below the diagonal. Means and standard deviations for the Female participants are presented in the vertical columns, and means and standard deviations for the Male participants are presented in the horizontal rows. Intercorrelations, means, and standard deviations for participants whose gender is unknown ( $n = 4$ ) are not included. PSS = Perceived Stress Scale; SCQ = Self-Care Questionnaire.

\*  $p < .05$

\*\*  $p < .01$

Table 4

*Summary of Correlations, Means, and Standard Deviations by Age Groups 18-24 ( $n = 30$ ) and 25-29 ( $n = 21$ ) for Scores on PSS, COPE Subgroups, and SCQ Subgroups.*

Measure	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
1. PSS	--	.19	.13	.03	-.07	-.19	.15	16.40	6.95
2. COPE-Task	-.28	--	.70**	.74**	-.02	-.11	.11	39.53	3.70
3. COPE-Emotion	-.49*	.53*	--	.53**	-.03	.37*	.03	29.23	2.84
4. COPE-Avoidance	-.19	.51*	.74**	--	.14	-.00	-.08	36.33	5.35
5. SCQ-Physical	-.37	.20	.20	.18	--	.27	-.09	14.80	5.79
6. SCQ-Social	.47*	-.11	-.37	-.45*	-.30	--	.03	14.70	10.28
7. SCQ-Spiritual	-.32	.38	.12	.00	.42	-.24	--	1.86	3.05
<i>M</i>	15.29	40.05	29.62	36.61	12.43	17.71	3.33		
<i>SD</i>	6.55	3.46	2.96	4.46	4.78	20.92	4.83		

*Note:* Intercorrelations for participants aged 18-24 years ( $n = 35$ ) are presented above the diagonal, and intercorrelations for participants aged 25-29 years ( $n = 21$ ) are presented below the diagonal. Means and standard deviations for participants aged 18-24 years are presented in the vertical columns, and means and standard deviations for participants aged 25-29 years are presented in the horizontal rows. Intercorrelations, means, and standard deviations for participants 36-44 years ( $n = 1$ ), 45-54 ( $n = 1$ ) and unknown age ( $n = 4$ ) are not included. See Table 6 for participants aged 30-35 years. PSS = Perceived Stress Scale; SCQ = Self-Care Questionnaire.

\*  $p < .05$

\*\*  $p < .01$

Table 5

*Summary of Correlations, Means, and Standard Deviations by Age Groups 30-35 years (n = 5) for Scores on PSS, COPE Subgroups, and SCQ Subgroups.*

Measure	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
1. PSS	--	-.46	-.67	-.04	.37	-.78	-.11	17.40	8.84
2. COPE-Task		--	.68	.65	.59	-.11	.20	37.40	3.78
3. COPE-Emotion			--	.74	.00	.32	.25	27.80	3.35
4. COPE-Avoidance				--	.43	-.39	-.08	34.00	5.66
5. SCQ-Physical					--	-.63	.39	8.20	7.60
6. SCQ-Social						--	.33	17.40	18.15
7. SCQ-Spiritual							--	5.20	6.42

*Note:* Intercorrelations, means, and standard deviations for participants 36-44 years ( $n = 1$ ), 45-54 ( $n = 1$ ) and unknown age ( $n = 4$ ) are not included. See Table 5 for participants 18-24 and 25-29 years. PSS = Perceived Stress Scale; SCQ = Self-Care Questionnaire.

\*  $p < .05$

\*\*  $p .01$

Table 6

*Summary of Correlations, Means, and Standard Deviations for PSS, COPE Subgroups, and SCQ Subgroups (N = 44) by Bachelors Degree Completion*

Measure	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
1. PSS	--	.09	.05	.09	-.01	-.14	.08	15.80	7.05
2. COPE-Task	-.61	--	.65**	.69**	.11	-.12	.01	39.50	3.76
3. COPE-Emotion	-.57	-.05	--	.60**	.13	.27	-.11	29.30	3.10
4. COPE-Avoidance	-.60	.04	.10**	--	.17	-.04	-.08	36.55	5.35
5. SCQ-Physical	-.89	.72	.65	.71	--	.17	.06	13.05	6.52
6. SCQ-Social	.81	-.09	-.90	-.89	-.72	--	-.13	14.83	10.13
7. SCQ-Spiritual	-.34	.43	.64	.69	.72	-.38	--	1.77	3.04
<i>M</i>	22.50	39.50	27.50	34.75	13.25	33.25	3.75		
<i>SD</i>	5.97	2.65	2.65	5.12	5.68	46.55	6.85		

*Note:* Intercorrelations for participants completing a bachelors degree less than 5 years ago ( $n = 40$ ) are presented above the diagonal, and intercorrelations for participants completing a bachelors degree more than 5 years ago ( $n = 4$ ) are presented below the diagonal. Means and standard deviations for participants completing a bachelors degree less than 5 years ago are presented in the vertical columns, and means and standard deviations for participants completing a bachelors degree more than 5 years ago are presented in the horizontal rows

\* $p < .05$

\*\* $p < .01$

Table 7

*Summary of Correlations, Means, and Standard Deviations for PSS, COPE Subgroups, and SCQ Subgroups (N = 7) by Masters or Doctoral Degree Completion*

Measure	1	2	3	4	5	6	7
1. PSS	--	-.02	.00	.27	.16	-.41	-.65
2. COPE-Task		--	.84*	.91**	.37	-.40	-.36
3. COPE-Emotion			--	.67	.03	-.02	.08
4. COPE-Avoidance				--	.57	-.64	-.58
5. SCQ-Physical					--	-.87*	-.67
6. SCQ-Social						--	.67
7. SCQ-Spiritual							--
<i>M</i>	12.14	38.14	29.00	34.43	11.43	18.14	4.43
<i>SD</i>	4.71	3.28	3.53	3.63	5.10	11.95	3.36

*Note:* Intercorrelations, means, and standard deviations for participants ( $n = 2$ ) completing a masters or doctoral degree over 5 years ago not included.

\* $p < .05$

\*\* $p < .01$

Table 8

*Summary of Correlations, Means, and Standard Deviations for PSS, COPE Subgroups, and SCQ Subgroups (N =5) by Prior Graduate Education in the Last 5 Years, No Degree Completed*

Measure	1	2	3	4	5	6	7
1. PSS	--	-.71	-.24	-.69	.09	-.18	-.42
2. COPE-Task		--	.46	.27	-.65	-.20	.67
3. COPE-Emotion			--	-.32	-.09	.28	.84
4. COPE-Avoidance				--	-.15	.45	-.34
5. SCQ-Physical					--	.22	-.09
6. SCQ-Social						--	-.20
7. SCQ-Spiritual							--
<i>M</i>	14.00	42.20	30.60	37.60	16.00	11.80	7.40
<i>SD</i>	4.64	3.03	1.14	1.95	2.55	3.63	7.30

*Note:* Intercorrelations, means, and standard deviations for participants ( $n = 2$ ) with prior graduate education over 5 years ago but no degree completed not included.

\* $p < .05$

\*\* $p < .01$

Table 9

*Summary of Correlations, Means, and Standard Deviations by Partnered ( $n = 16$ ) and Partnered Living Together ( $n = 19$ ) Relationship Status for PSS, COPE Subgroups, and SCQ Subgroups*

Measure	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
1. PSS	--	.45	-.10	.39	-.02	.14	-.13	18.44	7.41
2. COPE-Task	.27	--	.55*	.66**	.46	-.32	.10	38.69	3.28
3. COPE-Emotion	.10	.48*	--	.50	.22	-.51*	.08	28.88	2.39
4. COPE-Avoidance	.06	.18	.56**	--	.50*	-.55*	-.10	35.19	5.58
5. SCQ-Physical	-.36	.12	.08	.04	--	-.37	-.02	14.37	7.88
6. SCQ-Social	-.07	.14	.51*	.25	.13	--	-.17	24.56	25.48
7. SCQ-Spiritual	-.22	.11	.10	-.18	.41	.11	--	3.44	5.29
<i>M</i>	15.63	39.53	29.37	36.63	12.00	11.47	2.68		
<i>SD</i>	5.44	2.48	2.65	3.53	4.56	4.44	3.25		

*Note:* Intercorrelations for those in partnered relationships ( $n = 16$ ) are presented above the diagonal, and intercorrelations for those in partnered relationships and living together ( $n = 19$ ) are presented below the diagonal. Means and standard deviations for those in partnered relationships are presented in the vertical columns, and, means and standard deviations for those who are partnered and living together are presented in the horizontal rows. Intercorrelations, means, and standard deviations for those whose relationship status is unknown ( $n = 4$ ) or other ( $n = 2$ ) are not included.

\* $p < .05$

\*\*  $p < .01$



Table 10  
*Summary of Correlations, Means, and Standard Deviations for PSS, COPE Subgroups, and SCQ Subgroups by Not Partnered Relationship Status (n = 21)*

Measure	1	2	3	4	5	6	7
1. PSS	--	-.40	-.24	-.32	.07	-.37	-.06
2. COPE-Task		--	.78**	.82**	-.05	.30	.51*
3. COPE-Emotion			--	.75**	.09	.56*	.36
4. COPE-Avoidance				--	.09	.33	.25
5. SCQ-Physical					--	.18	-.27
6. SCQ-Social						--	-.02
7. SCQ-Spiritual							--
<i>M</i>	14.86	41.00	26.76	37.19	12.61	13.74	4.14
<i>SD</i>	7.14	4.82	4.09	5.89	6.13	8.63	8.77

*Note:* Intercorrelations, means, and standard deviations for those whose relationship status is unknown ( $n = 4$ ) or other ( $n = 2$ ) are not included.

\* $p < .05$

\*\*  $p < .01$

## Discussion

The purpose of this study was to determine the relationship between types of coping and self-care strategies used by students during their first semester in a graduate psychology program at an urban university in the Northwest and the amount of stress that was experienced during that time. It was hypothesized that those students engaging in more frequent self-care behaviors relating to physical, social, or spiritual activities would report lower levels of stress than those students engaging in self-care behaviors less frequently. The second hypothesis was that students whose coping strategies were Task-Focused would report having lower levels of stress than those students whose coping strategies were either Emotion-Focused or Avoidance-Focused. The results of this study did not support either hypothesis speculating that perceived stress levels would relate to types of coping or self-care strategies.

The students reported relatively low levels of perceived stress in this study. It is possible that the students reported less stress than expected because they had already become settled into the program by the time data collection occurred, in the third or fourth week of the term. It may also be that the students felt less stress in the early part of their first semester in graduate school because they were not yet as aware of the full expectations of being a graduate student. The lack of perceived stress may also be related to the younger age of students, many of whom may still be receiving financial support from parents or family members or have less responsibilities outside of school. Finally, it is also possible that this particular cohort has low perceptions of stress in general. Without having a comparison group this possibility cannot be ruled out.

Although the primary hypotheses of this study were unsupported, there were significant correlations between coping styles and self-care strategies that were of interest and that will be addressed in this discussion. Within the group as a whole, positive correlations were found

between Spiritual self-care strategies and Task-Focused coping, and between Spiritual self-care strategies and Emotion-Focused coping. This suggests that, in general, those participants endorsing self-care activities such as attending church, meditating, or praying also endorsed task-focused and emotion-focused coping strategies such as getting advice or information from others, coming up with strategies, and trusting God. However, it should be noted that approximately 50% of the participants reported spending no time engaged in religious or spiritual activities since beginning graduate school. It is also possible that the relationships between spiritual self-care strategies and both task-focused and emotion-focused coping could be as a result of content overlap between the COPE and SCQ. For example, Emotion and Task-Focused groups each contain a statement relating to God which is also likely to be considered a component of spiritual activities such as attending church or reading religious materials. Hasking & Oei (2001) suggest that the use of religion as a coping strategy should be considered under the avoidant-focused group, but also point out that the religion coping scale tends to load inconsistently on more than one factor. It is possible that, for some individuals, endorsement of religious activities focuses more on behaviors of avoidance such as seeking comfort in religion or making church activities a higher priority to avoid school related activities. On the other hand, it is possible that, for some people, endorsement of religious activities reflects task-focused or emotion-focused behaviors such as being a substitute activity, providing opportunities to get advice from others, or as an incentive to use the experience for personal growth.

The only significant finding related to gender was a positive relationship between Spiritual self-care activities and Task-Focused coping for women but not for men. If we consider spiritual activities as avoidant coping activities, then these results are not consistent with a study by Kariv and Heiman (2005) which indicated that men are more likely to use avoidant coping

strategies than women. If, however, we consider spiritual activities to be an active coping strategy, then this study provides additional support for Kariv's and Heiman's findings that women were more likely than men to engage in active coping strategies. It seems likely that the religious involvement reported by the students in this particular sample reflected active, social aspects of religion rather than avoidant aspects of religion. It is possible that the relationship between Spiritual self-care and Task-Focused coping strategies for women results from social connections related to religious activities which are effective in stress reduction.

For those students aged 18-24 years, a positive relationship was found between Social self-care strategies and Emotion-Focused coping strategies. This was consistent with other studies in which younger students were more likely to use emotion-focused or avoidance-focused coping strategies than task-focused coping strategies (Kariv & Heiman, 2005). Studies have also demonstrated that engaging in social relationships factors into being successful in graduate school (Nelson, Dell'Oliver, Koch, & Buckler, 2001) and in managing stress more effectively (Dwyer & Cummings, 2001). Graduate school is a situation in which connecting with peers, colleagues, and faculty is an important part of being successful. This behavior appears to be related to questions such as asking what other people have done in similar situations which are considered to be part of the emotion-focused coping category. It is likely that many students move from other areas in order to attend graduate school and, consequently, may know very few people. It is possible that in this situation social activities such as going to a party, spending time with friends, or using electronic media such as social networking sites also provide opportunities to use emotion-focused coping strategies such as getting emotional support from others, joking about the situation, or figuring out how to best handle the new situation. It is also possible that both aspects have a developmental component. Part of being a young adult often involves

interacting with new people or trying out new experiences to form one's social identity and to seek out intimate relationships.

The only significant correlation that related to obtained PSS scores was the negative correlation between the use of Emotion-Focused coping strategies and perceived stress levels for those students aged 25-29 years. Those students who reported using emotion-focused coping strategies such as planning, talking with others with similar experiences, or getting emotional support, also reported experiencing lower levels of stress. This appears to be consistent with other studies that have reported that successful students were more likely to use venting as a coping strategy (Nelson et al., 2001), that students who receive emotional support from family or friends also reported lower levels of stress (Truell, 2001), and that academic stress levels predicted the use of emotion-focused coping strategies (Kariv & Heiman, 2005). In this situation, it makes sense that the amount of perceived stress would be reduced for those students using emotion-focused coping strategies since these strategies include help seeking behaviors. It seems likely that students in an unfamiliar situation who do not seek information or answers for questions would experience more stress due to a perceived lack of control of their situation along with an uncertainty related to expectations of being a graduate student. Another aspect of emotion-focused coping strategies is to accept what has happened or to look for something good in the situation. Both of these strategies could be helpful in adapting to being a graduate student.

For those students aged 25-29 years, there was a significant negative relationship between Social self-care strategies and Avoidance-Focused coping behaviors. This suggests that, within this age group, those who spent a lot of time engaging in social activities such as going to parties, spending time with family, or eating with friends were less likely to exhibit avoidant behaviors such as letting things slide, pretending the situation does not exist, or expressing a lot

of emotional distress. Alternatively, these results also suggest that those students who endorsed engaging in many avoidant-focused coping strategies also tended to participate in fewer social activities. These results provide further support for the role that social interactions and negative coping strategies have for students. Bouteyre, Maurel, and Bernaud (2006) found that social support reduced depression levels in first year psychology students enrolled in a French university while Dyson and Renk (2006) reported that the use of avoidant coping strategies was a significant predictor of depressive symptomology. A logical extension of Dyson's and Renk's (2006) findings in the context of the current study is to suggest that those students who are either lacking in social support or are avoiding the reality of being a graduate student are more likely to experience symptoms of depression. It may be that social activities can be used as a proactive approach to reducing the levels of stress and depression for this age group.

There was a significant negative correlation between Physical and Social self-care strategies for those students who reported earning a graduate degree within five years of entering the program. In other words, as the amount of time spent in either physical or social activities increased, the amount of time spent in the opposing activities decreased. Physical and social activities have both been shown to be effective in reducing stress levels for individuals. (Nelson et al, 2001) However, there are studies suggesting that this may not be true for all populations. McKinzie , Altamura, Burgoon, and Bishop (2006) found that graduate students enrolled in a clinical psychology program who engaged in more weekly exercise reported higher stress than counterparts engaging in less exercise. While this finding might seem to suggest that exercise is not beneficial in reducing stress levels in this population, the authors suggest that the results may stem from students learning during their training that exercise is an effective stress reducer rather than indicating that exercise is ineffective for stress reduction. It is also possible that this result is

directly related to the amount of free time available. Most graduate students find themselves in the position of making choices related to the amount of study time required versus the amount of time for outside activities. For this particular population, the negative correlation between physical and social activities might be related to time constraints. Having recently completed a graduate degree, they are likely to have a higher level of awareness of time management than those who have not. Based on the previous experience, it is possible that they have established strategies which account for competing needs that their less experienced counterparts have not yet learned how to implement.

Those students who reported not being partnered reported a positive relationship between the use of Social self-care activities and the use of Emotion-Focused coping strategies. This is consistent with Dwyer and Cummings (2001) who found a positive correlation between the use of Emotion-Focused coping and perceived levels of social support for undergraduate students at a Canadian university. The author notes that many of the strategies that are grouped together in the Emotion-Focused category involve seeking support from others so the finding was not surprising. In addition to personal social supports, it is important to form social and professional connections with peers and faculty when beginning a new academic program. Because of this, it makes sense that this particular group of students would have a connection between social activities and coping strategies such as reaching out for emotional support, especially if they are new to the area and do not have a partner to fill their social needs.

There was a positive relationship between the amount of time spent engaging in Spiritual self-care activities and the use of Task-Focused coping strategies for those students who reported not being partnered. It is interesting to note that the same relationship was found both for the overall group and for female graduate students. It is possible that those who reported not being

partnered are also mostly female given the larger numbers of women compared to men overall which could explain the consistency between the different groups. As stated previously, it is also possible that this particular correlation is related to similar subject matter between the COPE and SCQ measures or that both the spiritual and task-focused activities provide a social support network.

There was a positive correlation between the amount of time spent engaging in Physical self-care activities and the use of Avoidance-Focused coping strategies. This suggests that those students who spend more time involved in physical activities also tend to cope with stressful situations by avoiding them. It is possible that the amount of time devoted to exercise is in itself an avoidance behavior that can be justified as being a healthy behavior.

There was also a negative relationship between Social self-care activities and Avoidance-Focused coping strategies for those students who reported being partnered. In 1998, Toray and Cooley reported that female undergraduate students who used Avoidant-Focused coping strategies also relied less on social support during times of stress, a finding which is consistent with this study. Avoidance-Focused behaviors have been correlated with depression (Dyson & Renk, 2006) suggesting that it is important to find strategies, such as social activities, that reduce avoidant behavior and may also reduce the risk of depressive symptoms. This finding also supports findings of Matheny, et al. (2005) in which increased coping resources including social support was negatively correlated with increased rates of sickness.

Finally, for those students who reported being partnered, there was a negative correlation between Social self-care activities and Emotion-Focused coping strategies. This is contradictory to the results of a study done by Dwyer and Cummings in 2001 in which there was a significant correlation between emotion-focused coping and the amount of social support reported from



friends. It may be that being partnered provides opportunities within the relationship that those who are not partnered have to find elsewhere. Perhaps students who are partnered participate less in social activities during their first semester of graduate school because they are juggling multiple roles and have less free time to socialize. It may also be that students who have a partner with whom they can vent have less need to use friendships, family members, and social activities during the adjustment to graduate school.

One of the main limitations of this study is that the sample population consists of a small number of graduate students from a single university in the Pacific Northwest. Furthermore, since all of the subjects were newly enrolled in a graduate level program leading towards a career as a mental health practitioner, there may have been some purposeful or unconscious desire to make a good impression or to otherwise appear better or worse than one's actual experience of stress, self-care, or coping. Additionally, the results of this study are not likely to generalize to students enrolled in graduate psychology programs at other universities and in other geographic areas.

While this study can provide a glimpse into the frequency of self-care behaviors reported by the sample and of how self-care relates to stress and coping strategies for this select population in a specific graduate program, this study lacks a comparison group of students entering into other similar graduate programs in health related fields. Without this comparison, we are unable to determine if the levels of self-care behaviors utilized by these graduate students relate specifically to personality characteristics of individuals choosing psychology, individuals choosing health related careers, or individuals choosing to attend graduate school in any field. Having a comparison sample would also provide the opportunity to evaluate whether the levels of stress reported by participants in this study are similar to levels of stress for students enrolled

in other graduate programs. It is possible that stress levels vary depending on the university or type of graduate program the student is enrolled in. Additionally, because this study only looks at behaviors during the first semester, and does not address the issue of what behaviors were in place prior to entering the program, it can only determine current behaviors rather than changes in behaviors. Results should be interpreted with caution due to the low number of males in the sample and the heterogeneity of age range. It is possible that in general that this may be representative of graduate programs in the clinical and counseling psychology programs; however, it is unlikely to be representative of other graduate or undergraduate programs, or the general population.

Self-care is a concept that is not well defined, in part because it encompasses some broad topics such as physical exercise, having social connections, or going on vacations. There are many variations underneath each broad category along with infinite variations on what individuals consider as necessary to take care of one self. This is further complicated by blurred boundaries between what constitutes self-care. Within the medical or mental health field, self-care has been used as a term to describe an individual's ability to maintain basic hygiene and household needs. More recently, the term self-care is being used in the mental health profession to represent strategies that should be used or are being used to be an emotionally healthy person. At present, there is no single term that adequately describes the range of activities, behaviors, or attitudes that are necessary components for self-care.

Not having a solid definition for self-care also creates problems in trying to find measures for use in research studies. There are published measures that use the term self-care either in the title, in the specific questions, or as part of a sub-grouping. However, many of the problems mentioned previously also apply here, creating a challenge in attempting to find a single measure

that covers the broader concept of self-care as related to emotional well-being. At this time the best approach is likely to be one in which the researcher defines what areas will be considered as self-care for the particular study and then uses a combination of measures to capture each area.

The Self-Care Questionnaire developed by the researcher was immune from some of the concerns listed above, but weak in other areas. Keeping the definition of self-care to a broader, general level provided the opportunity to obtain larger amounts of data regarding self-care strategies being used; however, narrowing the definition may have provided more specific data. Having a scoring system with more clearly defined constructs along with a scoring system such as a Likert scale would have provided better opportunities for comparison between different groups. It also would have been helpful to standardize the scoring system by providing maximum scores or using wording that clearly defined the subject of the question as well as the unit of measurement that was desired. One example of this would be to ask for the number of hours of sleep the respondent got each night as opposed to number of nights the respondent felt like the amount of sleep each night was satisfactory.

Another limitation in the current study was neglecting to include questions relating to how the respondents perceived their self-care strategies. It would have been useful to determine the student's perceptions regarding the quality of their self-care strategies at the time of data collection as well as prior to entering into the program. Collecting this information would have added depth to the study by being able to better understand how self-care behaviors change as a result of being a graduate student. Another missing component is related to the level of satisfaction or dissatisfaction with the type of activities or amount of activities and how that has shifted or not since becoming a graduate student.

Future research evaluating similarities and differences of self-care and coping strategies between those graduate students in psychology versus other programs could help determine if the baseline varies by program or if there is a common baseline across programs. It would also be interesting to determine whether the type of coping strategies shift for those students entering in to a research focused psychology program versus those students entering into a practitioner focused program. This might provide the opportunity to gain additional information as it relates to gender and different styles of self-care and coping strategies. Studies following a cohort from their first term through graduation would provide additional information related to how self-care might change for better or worse during the graduate school process, something that the current study was unable to provide. And finally, follow up studies could be done to determine how stable self-care behaviors are as individuals establish their professional careers.

In general, mental health professionals have a high focus on the needs of others which is an important component to working effectively with clients. However, it is also important to remember that unless we focus attention and time on our own needs, it will be much more difficult to maintain that effectiveness. In general, this study suggests that social supports and emotion focused coping strategies are important for this sample of psychology graduate students. Studies such as this one are important in determining strategies being used by graduate students as they enter into a program of study. Having a better understanding of current coping and self-care strategies can help guide decisions regarding what skills are appropriate or necessary to include in graduate training programs in psychology. Emphasizing the importance of taking care of one's self early in training is likely to be beneficial in creating a career that is both satisfying and sustainable. As a busy professional, it is much easier to continue established habits than to establish new ones. This suggests that it is important to emphasize the importance of practicing

self-care and the use of positive coping strategies during graduate school. Using this type of preventative approach increases the likelihood of having a satisfying career with an appropriate balance between personal and professional needs.

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## Appendix A

### COPE

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Then respond to each of the following items by blackening one number on your answer sheet for each, using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think "most people" would say or do. Indicate what YOU usually do when YOU experience a stressful event.

- 1 = I usually don't do this at all
- 2 = I usually do this a little bit
- 3 = I usually do this a medium amount
- 4 = I usually do this a lot

	1 = I usually don't do this at all	2 = I usually do this a little bit	3 = I usually do this a medium amount	4 = I usually do this a lot
1. I try to grow as a person as a result of the experience.	1	2	3	4
2. I turn to work or other substitute activities to take my mind off things.	1	2	3	4
3. I get upset and let my emotions out.	1	2	3	4
4. I try to get advice from someone about what to do.	1	2	3	4
5. I concentrate my efforts on doing something about it.	1	2	3	4
6. I say to myself "this isn't real."	1	2	3	4
7. I put my trust in God.	1	2	3	4
8. I laugh about the situation.	1	2	3	4
9. I admit to myself that I can't deal with it, and quit trying.	1	2	3	4
10. I restrain myself from doing anything too quickly.	1	2	3	4
11. I discuss my feelings with someone.	1	2	3	4
12. I use alcohol or drugs to make myself feel better.	1	2	3	4
13. I get used to the idea that it happened.	1	2	3	4
14. I talk to someone to find out more about the situation.	1	2	3	4
	1 = I usually don't do this at all	2 = I usually do this a little bit	3 = I usually do this a medium amount	4 = I usually do this a lot
15. I keep myself from getting distracted by other thoughts or activities.	1	2	3	4
16. I daydream about things other than this.	1	2	3	4
17. I get upset, and am really aware of it.	1	2	3	4
18. I seek God's help.	1	2	3	4
19. I make a plan of action.	1	2	3	4

20. I make jokes about it.	1	2	3	4
21. I accept that this has happened and that it can't be changed.	1	2	3	4
22. I hold off doing anything about it until the situation permits.	1	2	3	4
23. I try to get emotional support from friends or relatives.	1	2	3	4
24. I just give up trying to reach my goal.	1	2	3	4
25. I take additional action to try to get rid of the problem.	1	2	3	4
26. I try to lose myself for a while by drinking alcohol or taking drugs.	1	2	3	4
27. I refuse to believe that it has happened.	1	2	3	4
28. I let my feelings out.	1	2	3	4
29. I try to see it in a different light, to make it seem more positive.	1	2	3	4
30. I talk to someone who could do something concrete about the problem.	1	2	3	4
31. I sleep more than usual.	1	2	3	4
32. I try to come up with a strategy about what to do.	1	2	3	4
33. I focus on dealing with this problem, and if necessary let other things slide a little.	1	2	3	4
34. I get sympathy and understanding from someone.	1	2	3	4
35. I drink alcohol or take drugs, in order to think about it less.	1	2	3	4
36. I kid around about it.	1	2	3	4
37. I give up the attempt to get what I want.	1	2	3	4
38. I look for something good in what is happening.	1	2	3	4
39. I think about how I might best handle the problem.	1	2	3	4
40. I pretend that it hasn't really happened.	1	2	3	4
41. I make sure not to make matters worse by acting too soon.	1	2	3	4
	1 = I usually don't do this at all	2 = I usually do this a little bit	3 = I usually do this a medium amount	4 = I usually do this a lot
42. I try hard to prevent other things from interfering with my efforts at dealing with this.	1	2	3	4
43. I go to movies or watch TV, to think about it less.	1	2	3	4
44. I accept the reality of the fact that it happened.	1	2	3	4
45. I ask people who have had similar experiences what they did.	1	2	3	4
46. I feel a lot of emotional distress and I find myself expressing those feelings a lot.	1	2	3	4
47. I take direct action to get around the problem.	1	2	3	4
48. I try to find comfort in my religion.	1	2	3	4
49. I force myself to wait for the right time to do something.	1	2	3	4
50. I make fun of the situation.	1	2	3	4
51. I reduce the amount of effort I'm putting into solving the problem.	1	2	3	4
52. I talk to someone about how I feel.	1	2	3	4
53. I use alcohol or drugs to help me get through it.	1	2	3	4
54. I learn to live with it.	1	2	3	4
55. I put aside other activities in order to concentrate on this.	1	2	3	4
56. I think hard about what steps to take.	1	2	3	4
57. I act as though it hasn't even happened.	1	2	3	4
58. I do what has to be done, one step at a time.	1	2	3	4
59. I learn something from the experience.	1	2	3	4
60. I pray more than usual.	1	2	3	4

(Carver, 1989)

*Appendix B*

### Perceived Stress Scale- 10 Item

Instructions: The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with a check how often you felt or thought a certain way.

1. In the last month, how often have you been upset because of something that happened unexpectedly?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

2. In the last month, how often have you felt that you were unable to control the important things in your life?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

3. In the last month, how often have you felt nervous and "stressed"?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

5. In the last month, how often have you felt that things were going your way?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

6. In the last month, how often have you found that you could not cope with all the things that you had to do?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

7. In the last month, how often have you been able to control irritations in your life?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

8. In the last month, how often have you felt that you were on top of things?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

9. In the last month, how often have you been angered because of things that were outside of your control?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

\_\_\_0=never \_\_\_1=almost never \_\_\_2=sometimes \_\_\_3=fairly often \_\_\_4=very often



## *Appendix C*

### **Self-Care Questionnaire**

We are interested in how individuals who are in graduate school include different forms of self-care as part of their daily life. What is considered to be self-care for one individual may not be considered self-care for another individual so there is no right or wrong answers to the following questions. Please indicate which of the following activities you are currently doing since beginning graduate school by filling in the number of times you usually participate in each activity. Please put zero under the number of times per week if the activity is one that doesn't apply to you.

#### **Physical**

Activity Type	Number of Times per week
Workout at gym	(            )
Running or Jogging	(            )
Walking	(            )
Dance class	(            )
Bicycling	(            )
Yoga	(            )
Get enough sleep	(            )
Other	(            )

#### **Social**

Activity Type	Number of Times per week
Attend a party	(            )
Eat a meal with friends	(            )
Go to the movies	(            )
Attend a sports event	(            )
Attend a cultural event	(            )

Play games with a group ( )

Electronic interaction (ie: FaceBook, etc.) ( )

Volunteer work ( )

Book club ( )

Spend time with family ( )

Other ( )

## Spiritual

Activity Type	Number of Times per week
Attend church	( )
Meditate	( )
Read religious material	( )
Read spiritual material	( )
Celebrate religious holidays	( )
Have religious/spiritual rituals	( )
Participate in church activities	( )
Pray	( )
Other	( )

## Physical activity is important to me

Agree

Disagree

## Religion is important to me

Agree

Disagree

## Spirituality is important to me

Agree

Disagree

**Spending time with my family is important to me**

Agree

Disagree

**Spending time with my friends is important to me**

Agree

Disagree

**Open ended questions**

Has your level of activity changed since you began classes this semester?

If yes, has the level increased or decreased?

Has the type of activity you do changed since you began classes this semester?

If yes, please note briefly what the change was.

Overall, are you satisfied with the type and amount of self-care activity that you are currently involved in?

If no, please elaborate briefly on your reasons for dissatisfaction? (ie: not enough time, activity not available here, etc.)



*Appendix D*

**Demographics Questionnaire**

**Gender:**

\_\_\_\_\_ Male                  \_\_\_\_\_ Female                  \_\_\_\_\_ Other

**Age:**

\_\_\_\_\_ 18- 24                  \_\_\_\_\_ 25-29                  \_\_\_\_\_ 30-35  
 \_\_\_\_\_ 36-44                  \_\_\_\_\_ 45-54                  \_\_\_\_\_ Above 55

**Relationship Status:**

\_\_\_\_\_ Not currently partnered                  \_\_\_\_\_ Partnered                  \_\_\_\_\_ Partnered AND living together  
 \_\_\_\_\_ Other

**Prior Degrees** (please indicate highest degree obtained):

\_\_\_\_\_ Bachelor's degree earned **more** than 5 years ago  
 \_\_\_\_\_ Bachelor's degree earned **less** than 5 years ago  
 \_\_\_\_\_ Some graduate study, but no degree, most recently attended **more** than 5 years ago  
 \_\_\_\_\_ Some graduate study, but no degree, most recently attended **less** than 5 years ago  
 \_\_\_\_\_ Master's or Doctoral degree earned **more** than 5 years ago  
 \_\_\_\_\_ Master's or Doctoral degree earned **less** than 5 years ago

